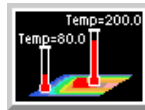Probe Interactively

INTRODUCTION

EnSight provides an interactive query capability that displays variable data in the Graphics Window as you move the mouse pointer over geometry, as you move the cursor tool within the model, or at specified node, element, ijk or xyz locations. The probe can display the value directly under the mouse pointer (by interpolating the nodal values of the applicable element) or search for and display the value at the node closest to the mouse pointer.

BASIC OPERATION

To probe interactively:

1. Click the Probe Icon (or select Query > Interactive Probe...).

2. Select the desired variable to display.

3. Set the Query pulldown to desired operation.

Surface Pick: Interpolate to any picked position on the surface of the model.

Cursor: Interpolate to location of cursor tool within the model.

Node: At a specific node number.

IJK: At a specific IJK location.

Element: At a specific element number.

XYZ: At a specific XYZ location.

5. Enter a value controlling the number of simultaneous probe markers displayed. Once this number has been reached, the oldest marker is replaced by each new marker.

6. If the selected variable is a vector variable, you can specify which component (or the magnitude) of the variable is displayed.

7. In addition to having the results displayed on the model in the graphics window, you can open a table that displays the results

8. When done, change the Query to None to disable interactive probing.

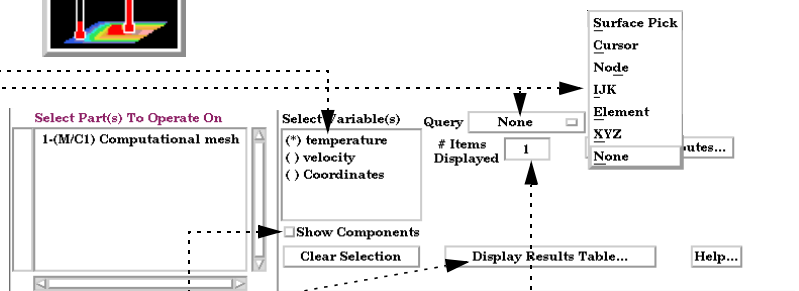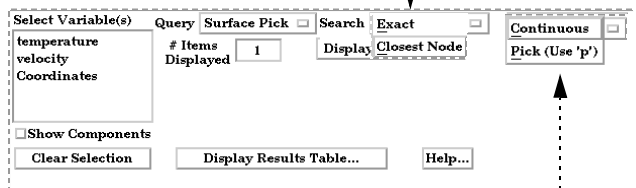**4. If Query is set to Surface Pick, you can select:**
   a) whether the probe will snap to closest node or
   b) use exact location.

   And whether the information will be sampled:
   c) when you click the "p" keyboard key or
   d) continuously as you move the mouse.

If Query is set to Node, Element, IJK, or XYZ, enter ID or values needed followed by Enter.

If Query is set to Cursor, move the cursor tool to desired location and press the "p" keyboard key (while the mouse is in the graphics window).

Probe Display Attributes

Probes are displayed as a marker (sphere) and the query text label. The appearance of the marker and label can be changed:
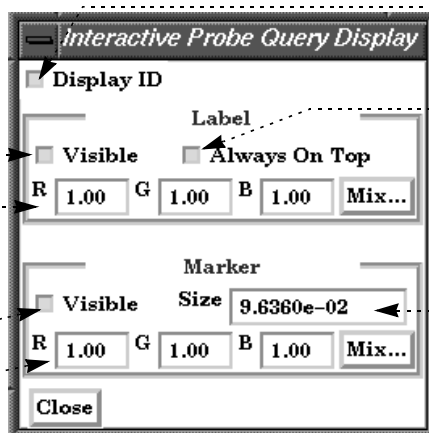
1. Click the Display Attributes... button in the Probe Quick Interaction area.

Toggle visibility for the query text label.

Set the color of the label.

Toggle visibility for the probe marker.

Set the color of the marker.

Interactive Probe Query Display

Display ID

Label

Visible   Always On Top

R 1.00 G 1.00 B 1.00 Mix...

Marker

Visible   Size 9.6360e-02

R 1.00 G 1.00 B 1.00 Mix...

Close

Toggle visibility for the id label. (Node id, element id, etc.)

Toggle whether query text labels are "always on top" (never hidden by geometry) or occluded by geometry that is closer.

Set the radius of all probe markers.

OTHER NOTES

Note that interactive query actions *do not* generate corresponding command language!

When in query mode with the Action set to Request, other picking options that use the 'p' key are disabled (such as the picks in Part Mode: Part, Cursor, Line, Plane, and LookAt Point).

The Quick Interaction area contains all the attributes that can be set for Probe Interactively. There is no Probe Feature Detail Editor.

SEE ALSO

How To Query/Plot

User Manual: **Interactive Probe Query**